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(54) Title: A NOVEL ENGINEERED SUPERANTIGEN FOR HUMAN THERAPY

	A	B
SEQ ID NO: 2 SEA/E-120	SEKSEEINEKDLRKKSELQGTALGNLKQIYYNSKAITSSSEKSADQFLTNTLLPKGFPTG	60
SEQ ID NO: 3 SEA/E-18	SEKSEEINEKDLRKKSELQGTALGNLKQIYYNEKAITENKESDDQFLENTLLPKGFPTG	60
SEQ ID NO: 7 SEE	SEKSEEINEKDLRKKSELQRNALSNLRLQIYYNEKAITENKESDDQFLENTLLPKGFPTG	60
SEQ ID NO: 4 SEA	SRKSEEINEKDLRKKSELQGTALGNLKQIYYNEKAKTENKESHDQFLQHTILFKGFPPTD	60

	C	
SEA/E-120	HPWYNDLILVDLGSTAATSEYEGSSVDLYGAYGYQCAGGTPNKTACMYGGVTIHDNNRLT	120
SEA/E-18	HPWYNDLILVDLGSKDATNKYKGGKVDLYGAYGYQCAGGTPNKTACMYGGVTIHDNNRLT	120
SEE	HPWYNDLILVDLGSKDATNKYKGGKVDLYGAYGYQCAGGTPNKTACMYGGVTIHDNNRLT	120
SEA	HSWYNDLILVDLPDSKDI VDKYKGGKVDLYGAYGYQCAGGTPNKTACMYGGVTIHDNNRLT	120

	D	E
SEA/E-120	EEKKVPINLWIDGKQTTVPIDKVKTSKKEVTQBELDLQARHYLHGKFGLYNSDSFGGKVQ	180
SEA/E-18	EEKKVPINLWIDGKQTTVPIDKVKTSKKEVTQBELDLQARHYLHGKFGLYNSDSFGGKVQ	180
SEE	EEKKVPINLWIDGKQTTVPIDKVKTSKKEVTQBELDLQARHYLHGKFGLYNSDSFGGKVQ	180
SEA	EEKKVPINLWIDGKQTTVPLETVTNKNKNTVQBELDLQARHYLQEKYLNYSVDVFGKVQ	180

	D	E
SEA/E-120	RGLIVFHSSEGSTVS YDLFDAQGQYPTLLRIYRDNTTISSTLSISLYLYTT	233
SEA/E-18	RGLIVFHSSEGSTVS YDLFDAQGQYPTLLRIYRDNTTINSENHIALYLYTT	233
SEE	RGLIVFHSSEGSTVS YDLFDAQGQYPTLLRIYRDNTTINSENHIALYLYTT	233
SEA	RGLIVFHSSEGSTVS YDLFDAQGQYPTLLRIYRDNTTINSENHIALYLYTT	233

(57) Abstract: The present invention relates to compositions and methods of use, wherein the composition comprises a conjugate of a bacterial superantigen and an antibody moiety. More particularly, the bacterial superantigen has been modified to decrease seroreactivity with retained superantigen activity.

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